

ABSTRACT OF THE DISCLOSURE

Disclosed is a security device coupled to a computing device, which is, in turn, coupled to a server through a computer network. The security device stores a serial number associated with the security device and a user key associated with the serial number. When the computing device attempts to log onto the server over the computer network, the server requests a serial number from the security device. If the serial number is stored within a user information database, the server obtains an associated user key and computes a challenge. Further, the server computes an expected response for the security device based on the associated user key. The server then sends the challenge to the security device over the computer network. If the server receives a response back from the security device that matches the expected response, the server will allow the computing device to log onto the server.